

ABSTRACT OF THE DISCLOSURE

Processes for producing GDP-fucose, comprising allowing GKDM and a culture broth of a microorganism capable of converting GKDM into GDP-fucose to be present in an aqueous medium, forming and accumulating GDP-fucose therein, and recovering the GDP-fucose therefrom; or comprising allowing a GTP precursor, a saccharide, a culture broth of a microorganism capable of forming GTP from a GTP precursor, and a culture broth of a microorganism capable of forming GKDM from a saccharide and GTP to be present in an aqueous medium, forming and accumulating GKDM therein, converting the accumulated GKDM into GDP-fucose using as a culture broth of a microorganism capable of converting GKDM into GDP-fucose to form and accumulate GDP-fucose therein, and recovering the GDP-fucose therefrom; and a process for producing GKDM, comprising allowing a GTP precursor, a saccharide, a culture broth of a microorganism capable of forming GTP from a GTP precursor, and a culture broth of a microorganism capable forming GKDM from a saccharide and GTP to be present in an aqueous medium, forming and accumulating GKDM therein, and recovering the GKDM therefrom.